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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,250	08/23/2005	Per Herbert Kristensen	P17993USPC	1874
29078	7590	12/29/2009	EXAMINER	
CHRISTIAN D. ABEL ONSAGERS AS POSTBOKS 6963 ST. OLAVS PLASS OSLO, N-0130 NORWAY			PRICE, CRAIG JAMES	
			ART UNIT	PAPER NUMBER
			3753	
			NOTIFICATION DATE	DELIVERY MODE
			12/29/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/538,250	<b>Applicant(s)</b> KRISTENSEN ET AL.	
	<b>Examiner</b> Craig Price	<b>Art Unit</b> 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/1/2009 has been entered.

#### ***Drawings***

Applicant's cancellation of claim 17 overcomes the previous drawing objection.

#### ***Claim Objections***

Applicant's cancellation of claim 8 overcomes the previous claim objection.

Claims 22 and 25 are objected to because of the following informalities: Claim 22, line 2, "pedestal by slewing mechanism" should be changed to - -pedestal by a slewing mechanism - -. Claim 25, line 2, "permit a the ", should be changed to - - permit an - -.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

Applicant's cancellation of claims 1-17 overcomes the previous 35 USC 112 rejection.

#### ***Specification***

Applicant's cancellation of claim 17 overcomes the specification objection.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 1 lines 20 and 21, discusses the limitation that “the longitudinal compensation is effected by the compression and extension of the spiral pipe section and not by the use of articulating or swivel joints in the spiral section”, the specification does not have any written support that the compensation is performed without the use of articulating or swivel joints. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 18-22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eagles (4,315,533) in view of Hanback (3,487,858).

Eagles discloses a system for transferring a fluid between two structures movable relative to each other, comprising,

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a crane pedestal (M) adapted for mounting on a first structure,

an offloading arm (Q) in the form of a crane boom rotatable about the crane pedestal in the horizontal plane and further moveable in the vertical plane,

a trolley (AM) attached to the crane boom, the trolley being movable along the length of the crane boom, the trolley comprising a connection member (AH) having a universal joint (AV,AW) adapted for connection to a receiving terminal (BF,BG) on a second structure (N),

a fluid-conveying pipe (AB,AC) extending from the first structure along the crane boom and connected to the trolley, the fluid conveying pipe having an arrangement (AD) for compensating for the longitudinal movement of the trolley,

wherein the compensating arrangement comprises a section (the straight section of AC) of substantially rigid pipe arranged along the crane boom in a spiral, the axis of spiral being arranged parallel to the longitudinal axis of the crane boom, the pipe being made of a material of sufficient rigidity that the pipe section will maintain its spiral shape and parallel relationship with the crane boom under the combined weight of the pipe itself and its fluid contents, but also having sufficient flexibility that the spiral section exhibits the capacity for compression and extension.

Eagles is silent to having the longitudinal compensation being effected by the compression and extension of the spiral pipe section and not by the use of articulating or swivel joints in the spiral section.

Hanback discloses a coiled flexible tubing assembly which teaches the use of a rigid spiral pipe section (18) where the longitudinal compensation is effected by the

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compression and extension of the spiral pipe section and not by the use of articulating or swivel joints in the spiral section.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a spiral pipe section as taught by Hanback for the lazy tong style pipe sections of Eagles in order to eliminate the swivel joints, thereby reducing potential leakage paths in the system.

Regarding claim 19, Eagles discloses that the fluid comprises a liquid (Col.1, Lns. 4-10).

Regarding claim 20, Eagles discloses that at least one of the structures is a ship (N).

Regarding claim 21, Eagles discloses that the fluid is LNG (Col. 1, Lns. 36-41).

Regarding claim 22, Eagles discloses a crane column (A) attached to the crane pedestal by slewing mechanism (Col. 4, Lns. 34-41) that provides rotating of the crane column relative to the crane pedestal in vertical axis relative to the platform, and wherein the crane boom is rotatable connected at essentially one end to the crane column by a hinged arrangement (V) and wherein a winch and wire assembly (shown in Figure 1, next to reference number Z) operate to raise and lower the crane boom.

Regarding claim 25, Eagles discloses that the length of the spiral section is predetermined to permit an expected degree of longitudinal movement, inherently the selection of the length of the pipe assemblies define the degree of longitudinal movement.

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Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eagles (4,315,533) in view of Hanback (3,487,858), and further in view of Carminati et al. (4,388,948).

Regarding claim 23, Eagles discloses that the connection member of the trolley comprises hinge joints (AV,AX) connected to a cone (BT).

Regarding claim 24, Eagles discloses that the connection member of the trolley comprises hinge joints (AV,AX) connected to a pin (BT).

Eagles discloses that the pin/cone mates with similar structure referred to as a roller box (BU), although is silent in that the roller box could be considered as a “rotating” table, where the cone is adapted to mate with a landing skirt of a rotating table of the receiving terminal of the second structure, and the pin is adapted to mate with a landing skirt of a rotating table of the receiving terminal of the second structure.

Carminati et al. discloses an articulated loading system which teaches the use of the cone or pin which is adapted to mate with a landing skirt (94) of a rotating table (108) of the receiving terminal of the second structure (18), as shown in Figure 2.

It would have been obvious to one of ordinary skill in the art to substitute a second structure connection mechanism having a landing skirt of a rotating table of the receiving terminal of the second structure, as taught by Carminati et al. for the second structure connection mechanism of Eagles in order to align the valves and pipe clamps (Col. 4, Lns. 38-45).

### ***Response to Arguments***

Applicant's arguments with respect to claims 18-25 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to the above rejection are not persuasive as the newly found reference to Hanback '858 discloses a rigid spiral pipe section used to transport liquid from one location to another which has the properties of acting like a spring as disclosed in column 1, lines 15-18 where the pipe is designed such that the "elastic limits" of the pipe are not exceeded, which when replaced with the conduit system of Eagles serves to eliminate the potential leak points of the swivel connection joints.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP

9 December 2009

/C. P./

Examiner, Art Unit 3753

/Robin O. Evans/

Supervisory Patent Examiner, Art Unit 3753